

METHODS AND APPARATUS FOR ASSEMBLING GAS TURBINE ENGINES

ABSTRACT OF THE DISCLOSURE

A method facilitates assembling a variable vane assembly for a gas turbine engine including a casing and an inner shroud. The method comprises providing at least one variable vane including a radially inner spindle that includes a groove defined therein that has at least one machined face, and coupling the variable vane radially between the casing and the inner shroud such that at least a portion of the radially inner spindle is inserted at least partially through an opening extending radially through the inner shroud. The method also comprises securing the variable vane to the inner shroud by engaging the spindle machined face with a retainer coupled to the inner shroud.